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10/694,589	10/27/2003	Kemal Guler	200208419-1	3759

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EXAMINER	
CRANFORD, MICHAEL D	

ART UNIT	PAPER NUMBER
3695	

NOTIFICATION DATE	DELIVERY MODE
02/24/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/694,589	GULER ET AL.	
	Examiner	Art Unit	
	MICHAEL D. CRANFORD	3695	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/28/09*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. This action is in reply to the amendment filed on 28 October 2009.
2. Claims 1 and 5 have been amended.
3. Claims 1-19 are currently pending and have been examined.
4. The rejections of claims 1-19 have been updated to reflect the amendments.

Response to Arguments

With regard to the limitations of claims 1-19, Applicant argues that Ausebel (US 6,021,398) fails to disclose every element found in claims 1-19. Examiner finds Applicant's arguments persuasive and chooses new grounds of rejection under 35 U.S.C. 103(a) which forms the basis of all obvious rejections. Examiner respectfully maintains rejections based on the information provided.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless –

   (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-19 are rejected under 35 U.S.C. 102 (b) as being unpatentable over Dawson (US PGP 2002/0042765 A1 – herein referred to as Dawson).
6. **Claim 1:**

   Dawson shown, discloses the following limitations:

- *organizing by a processor, previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders, the number of bidders varying among the sub-samples* (see at least page 2 paragraphs 0023, 0024, 0025 and 0027)
- *applying, by a processor an inverse bid function to at least two sub-samples* (see at least page 2 paragraph 0033)
- *pooling, by the processor, results from applying the inverse bid function to form a first pool* (see at least page 2 paragraph 0033)
- *applying, by the processor, a direct bid function on the first pool to generate sample bids* (see at least page 3 paragraph 0043)
- *matching, by the processor, bids from at least one sub-sample to the sample bids* (see at least page 2 paragraph 0025)
- *pooling, by a processor results from the matching with the first pool to form a second pool* (see at least page 2 paragraphs 0025 and 0033)

7. **Claim 2:**

Dawson shown, discloses the following limitations:

- *applying a function that is applicable to an independent private values ("IPV") auction* (see at least page 2 paragraphs 0023, 0024, 0025, 0027 and 0033)

8. **Claim 3:**

Dawson shown, discloses the following limitations:

- *applying a function that is applicable to an independent private values ("IPV") auction* (see at least page 8 paragraph 0162)

9. **Claim 4:**

Dawson shown, discloses the following limitations:

- *forming a first group of large sub-samples and a second group of small sub-samples* (see at least page 3 paragraph 0043)

- *small sub- samples containing bid data associated with auctions that have fewer than a pre- specified total number of bid observations* (see at least page 3 paragraph 0043)
- *large sub-samples containing bid data associated with auctions that have more than a pre-specified total number of bid observations* (see at least page 3 paragraph 0043)

10. Claim 5:

Dawson shown, discloses the following limitations:

- *organizing, by the processor, previously acquired auction data into a plurality of sub-samples, each sub-sample comprising bid data associated with auctions having a common number of bidders, a first sub- sample comprising bid data associated with auctions having more bidders than all other sub-samples* (see at least page 2 paragraphs 0023, 0024, 0025 and 0027)
- *applying, by the processor, an inverse bid function to the largest sub- sample to produce initial pseudo values* (see at least page 2 paragraph 0033)
- *applying, by the processor, a direct bid function to the initial pseudo values to calculate sample bids associated with a second sub-sample that is the next largest sub-sample, in terms of number of bidders, after the first sub-sample* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *matching, by the processor, bid data contained in the second sub-sample with the sample bids to produce second pseudo values* (see at least page 2 paragraph 0025)
- *combining, by the processor the first and second pseudo values together to produce combined auction values* (see at least page 6 paragraph 0113)

11. Claim 8:

Dawson shown, discloses the following limitations:

- *applying the direct bid function to calculate additional sample bids associated with additional sub-samples of decreasing size, in terms of the number of bidders* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)

- *matching the sample bids to the additional sub-samples to produce additional pseudo values, combining the additional pseudo values into the combined auction values* (see at least page 2 paragraph 0025)

12. Claim 9:

Dawson shown, discloses the following limitations:

- *processor* (see at least page 6 paragraph 0113)
- *memory containing an auction application that is executed by the processor and causes the processor to form a plurality of sub-samples from an auction data set* (see at least page 3 paragraph 0041)
- *each sub-sample comprising bid data associated with auctions having a common number of bidders* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *apply an inverse bid function to at least two sub-samples* (see at least page 2 paragraph 0033)
- *aggregate results from applying the inverse bid function to form a first pool* (see at least page 2 paragraph 0033)
- *apply a direct bid function on the first pool to generate sample bids* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *match bids from at least one sub-sample to the sample bids* (see at least page 2 paragraph 0025)
- *aggregate results from the matching with the first pool to form a second pool* (see at least page 2 paragraph 0025)

13. Claim 10:

Dawson shown, discloses the following limitations:

- *inverse bid function comprises a function that is applicable to an independent private values ("IPV") auction* (see at least page 2 paragraphs 0023, 0024, 0025, 0027 and 0033)

14. Claim 11:

Dawson shown, discloses the following limitations:

- *direct bid function comprises a function that is applicable to an independent private values ("IPV") auction* (see at least page 2 paragraphs 0023, 0024, 0025, 0027 and 0033)

15. Claim 12:

Dawson shown, discloses the following limitations:

- *processor* (see at least page 6 paragraph 0113)
- *application executable by said processor and that causes the processor to organize previously acquired auction data into a plurality of sub-samples* (see at least page 6 paragraph 0113)
- *each sub-sample comprising bid data associated with auctions having a common number of bidders* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *apply an inverse bid function to at least two sub-samples* (see at least page 2 paragraph 0033)
- *re-sample results from applying the inverse bid function to generate re-sampled data* (see at least page 2 paragraph 0033)
- *apply a direct bid function on the sampled data to generate sample bids* (see at least page 2 paragraph 0033)
- *match bids from at least one sub-sample to the sample bids* (see at least page 2 paragraph 0025)

16. Claim 13:

Dawson shown, discloses the following limitations:

- *inverse and direct bid functions comprise functions that are applicable to an independent private values ("IPV") auction* (see at least page 2 paragraphs 0023, 0024, 0025, 0027 and 0033)

17. Claim 14:

Dawson shown, discloses the following limitations:

- *one instruction that organizes previously acquired auction data into a plurality of sub-samples* (see at least page 2 paragraph 0025)
- *each sub-sample comprising bid data associated with auctions having a common number of bidders* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *one instruction that applies a first bid function to at least two sub-samples* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *one instruction that re-samples results from applying the first bid function to generate re-sampled data* (see at least page 2 paragraph 0025)
- *one instruction that applies a second bid function on the sampled data to generate sample bids* (see at least page 2 paragraph 0025)
- *one instruction that matches bids from at least one sub-sample to the sample bids* (see at least page 2 paragraph 0025)

18. Claim 15:

Dawson shown, discloses the following limitations:

- *first bid function comprises an inverse bid function* (see at least page 2 paragraph 0033)

19. Claim 16:

Dawson shown, discloses the following limitations:

- *second function comprises a direct bid function* (see at least page 2 paragraphs 0023, 0024, 0025 and 0027)

20. Claim 17:

Dawson shown, discloses the following limitations:

- *one instruction that forms previously acquired auction data into a plurality of sub-samples* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)

- *each sub-sample comprising auction data associated with auctions having a common number of bidders* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *first sub-sample comprising bid data associated with auctions having more bidders than all other sub-samples* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)
- *one instruction that applies an inverse bid function to the largest sub-sample to produce initial pseudo values* (see at least page 2 paragraph 0033)
- *one instruction that applies a direct bid function to the initial pseudo values to calculate sample bids associated with a second sub-sample that is the next largest sub-sample, in terms of number of bidders, after the first sub-sample* (see at least page 2 paragraph 0025)
- *one instruction that matches bid data contained in the second sub-sample with the sample bids to produce second pseudo values* (see at least page 2 paragraph 0025)
- *one instruction that combines the first and second pseudo values together to produce combined auction values* (see at least page 2 paragraph 0025)

21. Claim 18:

Dawson shown, discloses the following limitations:

- *one instruction that applies the direct bid function to the combined auction values to calculate additional sample bids* (see at least page 2 paragraph 0033….see also page 5 paragraph 0101)

22. Claim 19:

Dawson shown, discloses the following limitations:

- *matching the additional sample bids with a sub-sample to produce additional auction values* (see at least page 2 paragraph 0025)

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

23. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (US PGP 2002/0042765 A1 – herein referred to as Dawson) in view of Jameson (US PGP 2004/0103013 A1 - herein referred to as Jameson).

24. Claim 6:

Dawson does not expressly disclose ***applying the direct bid function to the combined auction values to calculate additional sample bids associated with a third sub-sample that is the next largest sub-sample after the second sub-sample, in terms of number of bidders.***

In a similar field of endeavor, Jameson discloses classification Tree techniques use data to build decision trees and then use the resulting decision trees for classification. Initially, they split a dataset into two or more sub-samples. Each split attempts maximum discrimination between the sub-samples. (Jameson, see at least page 5 paragraph 0128).

Therefore, the ordinary practitioner of the art at the time of the invention would have found it obvious to combine the above selected teachings of Dawson and Jameson with the practitioner's own knowledge in order to disclose ***applying the direct bid function to the combined auction values to calculate additional sample bids associated with a third sub-sample that is the next largest sub-sample after the second sub-sample, in terms of number of bidders,*** motivated by apparatus and methods for handling trading data (Dawson, [TITLE]).

25. Claim 7:

Dawson does not expressly disclose ***matching the additional sample bids with the third sub-sample to produce third pseudo values and combining the third pseudo values into the combined auction values.***

In a similar field of endeavor, Jameson discloses classification Tree techniques use data to build decision trees and then use the resulting decision trees for classification. Initially, they split a dataset into two or more sub-samples. Each split attempts maximum discrimination between the sub-samples. (Jameson, see at least page 5 paragraph 0128).

Therefore, the ordinary practitioner of the art at the time of the invention would have found it obvious to combine the above selected teachings of Dawson and Jameson with the practitioner's own knowledge in order to disclose ***matching the additional sample bids with the third sub-sample to produce third pseudo values and combining the third pseudo values into the combined auction values,*** motivated by apparatus and methods for handling trading data (Dawson, [TITLE]).

CONCLUSION

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Michael D. Cranford** whose telephone number is **571-270-3106.** The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Charles Kyle** can be reached at **571-272-6746**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair <http://pair-direct.uspto.gov >. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

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/ Michael Cranford / Examiner / Art Unit 3696 /
February 6, 2010

/Charles R. Kyle/
Supervisory Patent Examiner, Art Unit 3695